

REMARKS/ARGUMENTS

Applicants have received the Final Office Action dated December 23, 2008 (hereinafter "Current Office Action"), wherein: 1) claims 1-15, 21-34, 40-53, 59-72, 78-87 and 92-95 were rejected under 35 U.S.C. § 103(a) as allegedly obvious over Valdevit et al. (U.S. Pat. App. Pub. No. 2002/0156918, hereinafter "Valdevit") in view of Soloway et al. (U.S. Pat. No. 6,532,212, hereinafter "Soloway"); and 2) claims 17-20, 36-39, 55-58, 74-77 and 88-91 were rejected under 35 U.S.C. § 103(a) as allegedly obvious over Valdevit in view of Soloway, and further in view of Srikanth et al. (U.S. Pat. No. 6,430,621, hereinafter "Srikanth"). Applicants have amended claims 21, 36-39 and 59. Based upon the amendments and arguments presented herein, Applicants respectfully submit that all claims are in condition for allowance.

I. THE REJECTIONS OF THE INDEPENDENT CLAIMS

In responding to the arguments regarding the independent claims submitted to the Office by Applicants on September 25, 2008 (hereinafter "Prior Response") in response to the Office Action of July 3, 2008 (hereinafter "Prior Office Action"), it was stated in the Current Office Action that, "It is noted that applicant is just referring to the definition of 'trunking' recited in Soloway's disclosure."¹ Applicants respectfully submit that the Current Office Action thus acknowledges that the definition cited in Applicants' Prior Response is the definition of trunking taught by Soloway, *i.e.*, that trunking "refers generally to methods that manage the available communication bandwidth of **the plurality of redundant links in aggregate**, rather than individually."²

Applicants note that Soloway further teaches that, "In accordance with FIG. 4, the trunking feature of the present invention makes efficient use of **the redundant ISLs between neighboring switches 300 and 310**,"³ wherein "Fibre Channel switch 300 is coupled to Fibre Channel switch 310 **through a plurality of inter-switch links**

¹ Office Action, ¶ 2, p. 2.

² Soloway, col. 6, lines 23-26 (emphasis added).

³ Soloway, col. 6, lines 21-23 (emphasis added).

(ISL's)."⁴ These inter-switch links are shown in Fig. 4 of Soloway as ISLs 330, 340, 350, 360 and 370. Therefore, in light of the definition of "trunking" acknowledged as taught by Soloway in the Current Office Action, Applicants submit that Soloway teaches making efficient use of redundant ISLs 330-370 by managing the available bandwidth of ISLs 330-370 in aggregate, i.e., by "trunking" ISLs 330-370 together as a single group. ISLs 330-370 are thus treated as a single trunk, not each ISL as an individual trunk (as apparently implied in the Prior Office Action),⁵ nor as separate groupings of ISL (as expressly stated in the Current Office Action).⁶

Indeed, Soloway *expressly* teaches that all of the ISLs between the two switches of Fig. 4 are each individually available for load balancing at any time. Specifically, Soloway teaches that,

All ISLs that lead to adjacent switches on the shortest path to the flow's destination are considered when rerouting flows to that destination. For example, when the FSPF protocol determines that ISL 370 is the shortest path to switch 310, **a flow may be rerouted onto ISL 330, 340, 350 or 360 since each ISL couples switch 300 to switch 310.** In other words, even if a link is not on the FSPF-determined path to a flow's destination, the flow may be routed onto the link to relieve congestion.⁷

There is no indication in the cited text, or anywhere else within Soloway, that the ISLs are ever combined into multiple separate groups of ISLs, such as the unsubstantiated arbitrary groups presented in the Current Office Action. Thus, Soloway clearly does not teach or even suggest the "at least two trunk groups" required by each of the independent claims of the subject Application.

Applicants further note that Soloway also expressly teaches that,

Load-balancing among ISLs 330, 340, 350, 360 and 370 in accordance with the present invention requires no configuration by the user, other than enabling the trunking aspect of the present invention. In particular, there is **no need to manually configure the ISLs of FIG. 4 into "trunk groups"**

⁴ Soloway, col. 6, lines 10-12 (emphasis added).

⁵ See Prior Office Action, ¶ 3, p. 4 ("Soloway... teaches a Fibre Channel fabric... including at least two trunk groups (Fig 4, element 330, 340, 350 and 360)...").

⁶ See Current Office Action, ¶ 3, p. 4 ("Soloway... teaches a Fibre Channel fabric... including at least two trunk groups (Fig 4, elements 330 and 340, 350 and 360)...").

⁷ Soloway, col. 7, lines 35-43 (emphasis added).

of **redundant links** that can offload each other. Instead, **candidate links** for rerouting of a flow are identified automatically from a topology database maintained by the FSPF protocol.⁸

Thus Soloway arguably teaches *away* from the use of the required trunk groups, instead teaching load-balancing between **all** available links coupling two switches together.

For at least these reasons, Applicants respectfully submit that Soloway does not teach or even suggest “at least two trunk groups” as required by each of independent claims 1, 21, 40, 59, 78 and 92. Further, none of the other art cited, either alone or together (including Valdevit, as acknowledged in the Office Action⁹), overcomes this deficiency of Soloway. Applicants therefore respectfully submit that none of the independent claims are rendered obvious by any of the cited art, and respectfully request withdrawal of the rejections of claims 1, 21 (as amended)¹⁰, 40, 59 (as amended), 78 and 92 under 35 U.S.C. § 103(a).

Applicants additionally note that it was stated in the Current Office Action that, “Furthermore, applicant’s disclosure only calls for one trunking group.”¹¹ This allegation was made without a single citation to the specification of the subject Application (hereinafter “Specification”), and is in complete contradiction with the title, abstract, detailed description and claims as originally filed,¹² all of which repeatedly refer to “**trunking groups**” (**plural**) or “**at least two** trunking groups.” In any event, Applicants note for the record that this allegation is irrelevant. Only what the **claims** require is relevant, and each and every independent claim (and thus each and every dependent claim), as **originally and currently submitted**, requires “**at least two** trunking groups,”

⁸ Soloway, col. 7, lines 26-34 (emphasis added).

⁹ See Office Action, ¶ 3, p. 4 (“Valdevit discloses the entire claimed invention **except for the switch fabric comprises at least two trunk groups**”) (emphasis added).

¹⁰ Applicants note that the amendments to independent claims 21 and 59 are related to the amendments to dependent claims 36-39, as described below.

¹¹ Office Action, ¶ 2, p. 2.

¹² See, e.g., Specification, Title (“Frame Traffic Balancing Across **Trunk Groups**”); Abstract (“Embodiments of methods, apparatuses and/or systems for balancing flow across **trunk groups** are discussed.”); ¶ [0045] (“...it may be desirable to have the capability to balance frame traffic across or between **at least two trunked groups**, regardless of the size of the particular trunked groups themselves.”); ¶ [0046] (“In addition, the set of possible exit ports may include at least some of the exit ports of **at least two trunked groups**.”); and claims 1, 2, 21, 40, 59, 78 and 92 (as originally filed) (emphasis added).

which (as already shown) is a claim element not taught or even suggested by any of the cited art, either alone or together.

II. THE REJECTIONS OF THE DEPENDENT CLAIMS

Dependent claims 2-15, 22-34, 41-53, 60-72, 79-87 and 93-95 were rejected as allegedly obvious over Valdevit in view of Soloway,¹³ and dependent claims 17-20, 36-39, 55-58, 74-77 and 88-91 were rejected as allegedly obvious over Valdevit in view of Soloway, and further in view of Srikanth.¹⁴ Applicants respectfully submit that because these claims each depend upon one of the Independent Claims, these dependent claims are all not rendered obvious by the cited art for at least the same reasons as those presented above with regard to independent claims 1, 21 (as amended), 40, 59 (as amended), 78 and 92. Applicants therefore respectfully request withdrawal of the rejections of dependent claims 2-15, 22-34, 41-53, 60-72, 79-87 and 93-95 under 35 U.S.C. § 103(a).

Applicants further note that in responding to the arguments presented in Applicants' Prior Response, the Office Action only addressed claims 36 and 37, alleging that these claims are representative of all the dependent claims, and further alleging that "the claims as written do not specify whether the tag is being 'added by the switch' or whether the tag is being 'stripped by the same switch'."¹⁵ Applicants respectfully traverse this characterization of the dependent claims, noting that claims 36 and 37 are not representative of the remaining dependent claims, and that at least some of the remaining dependent claims expressly require that several of the operations and elements required by the claims be performed by, or included within, a single switch.

More specifically, and using dependent claim 17 as a representative example, independent claim 1 (upon which claim 17 depends) requires,

¹³ See Office Action, ¶ 3, p. 3.

¹⁴ See Office Action, ¶ 4, p. 6.

¹⁵ See Office Action, ¶ 2, p. 2.

A method of routing a flow of frames through a switch comprising:... applying a process **to select an exit port of said switch** from a set of possible exit ports...,¹⁶

and dependent claim 17 requires,

wherein at least one of said set of possible exit ports is selected based at least in part on a source tag and/or a destination tag added to said at least one frame **after said at least one frame enters said switch**.¹⁷

Applicants note that it is a fundamental principal of claim construction that a claim element first referenced with “a” or “an,” and subsequently referenced with “the” or “said,” **is the same claim element**. Thus, given that the selected exit port is “of said switch,” and that the source/destination tag is added after the at least one frame “enters said switch,” “said switch” is, as a matter of basic claim construction, the same single switch referenced throughout the claim. Therefore, dependent claim 17, **by the express language of the claim itself, requires** that the addition of the required tag be performed after the at least one frame enters **the same single switch required by the claim** that includes the selected exit port, and which thus **must** logically perform the selection, since the tag used as a basis to select the exit port is added after entering the switch, but before the frame exits the switch since the switch’s exit port must first be selected. Other dependent claims (*e.g.*, dependent claim 55) more expressly require that “said switch” perform the selection of the exit port.

From the above it is clear that all operations or elements required by the claims to be performed by, or included in, “said switch” are performed by, and included within, the same single switch. Applicants do acknowledge, without conceding the merits of the rejection, that some of the claims may not have made this requirement as clear as desirable, and have amended independent claims 21 and 59, as well as dependent claims 36-39, to make it clear that where required by these claims, only one switch (*e.g.*, “said first switch” in claim 36) performs the required operation(s) and includes the required element(s).

¹⁶ Emphasis added.

¹⁷ Emphasis added.

For at least these reasons, Applicants respectfully submit that dependent claims 2, 17-20, 36-39 (as amended), 55-58, 74-77 and 88-91 all require that at least some of the claimed operations be performed by, and at least some of the claimed elements be included within, a single switch, and further submit that such operations and elements that are required to be within a single switch are not taught by any of the art cited, either alone or together, as already argued in the Prior Response (said arguments from the Prior Response regarding these dependent claims being herein restated and incorporated by reference). Applicants therefore respectfully submit that dependent claims 2, 17-20, 36-39 (as amended), 55-58, 74-77 and 88-91 are not rendered obvious by any of the art cited, and respectfully request withdrawal of the rejections of these claims under 35 U.S.C. § 103(a).

CONCLUSION

Applicants respectfully request reconsideration and that a timely Notice of Allowance be issued in this case. Applicants believe that no extensions of time or fees are required, beyond those that may otherwise be provided in documents accompanying this response. Nonetheless, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to Wong Cabello's Deposit Account No. 50-1922, referencing docket number 112-0135US.

Respectfully submitted,

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